PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE
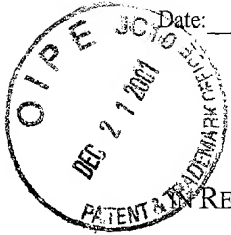
IN RE APPLICATION OF:

        Nourbakhsh, *et al.*

SERIAL NO.: 09/899,895

FILED: July 5, 2001

FOR: **METHOD AND APPARATUS FOR LONG-RANGE PLANNING**

EXAMINER: Unknown

ART UNIT: 2122

PRELIMINARY AMENDMENT

Assistant Commissioner of Patents
Washington, D.C. 20231

Sir:

Prior to examination please amend the above-identified patent application as follows:

In the Specification:

On page 7, please replace the paragraph starting on line 4 with the following paragraph:

Figure 2A is a user interface screen of an embodiment. The screen shot continues in **Figure 2B**.

On page 7, please replace the paragraph starting on line 14 with the following paragraph:

Figure 8A is an illustration of a user interface screen that allows tabbing between different scenarios. The screen shot continues in **Figure 8B**.

On page 7, please replace the paragraph starting on line 16 with the following paragraph:

Figure 9A is an illustration of a user interface screen that allows tabbing between different scenarios. The screen shot continues in **Figure 9B.**

On page 7, please replace the paragraph starting on line 18 with the following paragraph:

Figure 10A is an illustration of a user interface screen that shows interleaved column grids from different scenarios. The screen shot continues in **Figure 10B.**

On page 8, please replace the paragraph starting on line 1 with the following paragraph:

Figure 11A is an illustration of a user interface screen that shows interleaved row grids from different scenarios. The screen shot continues in **Figure 11B.**

On page 8, please replace the paragraph starting on line 3 with the following paragraph:

Figure 12A is an illustration of a user interface screen including a graph application. The screen shot continues in **Figure 12B.**

On page 8, please replace the paragraph starting on line 4 with the following paragraph:

Figure 13A is an illustration of a user interface screen including a graph application. The screen shot continues in **Figure 13B.**

On page 8, please replace the paragraph starting on line 5 with the following paragraph:

Figure 14A is an illustration of a user interface screen including a performance summary report. The screen shot continues in **Figures 14B-14D.**

On page 15, please replace the paragraph starting on line 5 with the following paragraph:

As shown in **Figures 2A-2B**, the main interface 200 of one embodiment consists of sets of grids in a central screen area. Three panes 204, 206, and 208 are positioned in a large column, with a fourth menu pane 202 to the left of the column. The top pane 204 contains a set of grids, one for each queue in the purview of the user's contact center(s). In one embodiment, a queue is defined as a stream of contacts. Through the grouping of various call typed into various queues, the user identifies physically or logically separate loads upon the contact center. Each queue grid includes temporally indexed information on the following statistics: contact volume; percentage of volume distribution; average handling time; actual service level expected; required staff hours; and capacity staff hours. In addition, each queue has both a queue type and service goals that are set by the user.

On page 21, please replace the paragraph starting on line 1 with the following paragraph:

Another function of the long-range planner is a comparator display that facilitates the use of data generated by the long-range planner. In order to enable what-if workflow, in which the user wishes to visually compare multiple long-range plan alternatives, one embodiment of a user interface includes tabs for viewing two long-range planner scenarios alternately. **Figures 8A-8B** show a user interface screen with tabs. The scenario corresponding to the left tab is displayed. **Figures 9A-9B** show a user interface screen in which the "new scenario" corresponding to the right tab is displayed.

On page 21, please replace the paragraph starting on line 8 with the following paragraph:

In another embodiment, the comparator display includes a method for comparing multiple grids that have similar dimensionality on a single screen. Using column-major or row-major viewing formats, as indicated by the user, the comparator display interleaves any number of grids so that each Nth row or, alternatively, each Nth column of the resulting merged grid represents data from the Nth long-range plan alternative. In this manner, the user can compare multiple columns or rows of data from a single viewpoint. **Figures 10A-10B** show a display with interleaved column grids, and **Figures 11A-11B** show a display with interleaved row grids.

On page 22, please replace the paragraph starting on line 1 with the following paragraph:

Figures 12A-12B and **13A-13B** illustrate a graphing capability available in an embodiment of the user interface. **Figures 12A-12B** show the tabbed user interface screen in the background and a graph pop-up in the foreground. The user may select an attribute to graph and a scenario or scenarios to include in the graph. **Figures 13A-13B** show the background screen of Figures 12A-12B with a pop-up with the resulting graph. The graph shows contact volume for a chosen queue.

On page 22, please replace the paragraph starting on line 6 with the following paragraph:

Figures 14A-14D are a user interface illustrating an aspect of the reporting capability available in an embodiment that coordinates with Excel™ to produce sophisticated, easy to read reports that include data produced by the long-range planner.

On page 22, please replace the paragraph starting on line 9 with the following paragraph:

An interactive, intelligent Wizard is provided in one embodiment. As shown in **Figures 2A-2B**, Wizards are accessible to the user through the menu pane 202 of the main interface 200. The Wizards interacts with the user to guide the user through many of the functions of the long-range planner. A series of work-flows covering all of the major available activities of the long-range planner provide handheld best practices approaches for each individual activity. The Wizard provides direct hyperlinks with the continuation into the long-range planner. In complex parametric cases, the Wizard offers an alternative to filling out complex information directly. Instead, the Wizard offers a questionnaire; when the user completes the questionnaire the appropriate grid parameters are automatically specified. As shown in **Figures 2A-2B**, some of the activities available through the Wizards are creating a cost model, calculating accurate shrinkage, creating/adding a new agent profile, and creating/adding a new queue.

In the Drawings:

Please replace Figure 2 with Figures 2A-2B, enclosed herewith.

Please replace Figure 8 with Figures 8A-8B, enclosed herewith.

Please replace Figure 9 with Figures 9A-9B, enclosed herewith.

Please replace Figure 10 with Figures 10A-10B, enclosed herewith.

Please replace Figure 11 with Figures 11A-11B, enclosed herewith.

Please replace Figure 12 with Figures 12A-12B, enclosed herewith.

Please replace Figure 13 with Figures 13A-13B, enclosed herewith.

Please replace Figure 14 with Figures 14A-14D, enclosed herewith.

REMARKS

Entry of the above amendments prior to examination is respectfully requested.

Attached hereto is a marked-up version of the changes made to the specification by the current amendment. The attached page(s) is/are captioned **"Version with Markings to Show Changes Made."**

I. Amendments

A. Amendments to the Specification

The specification is amended in accord with the amended figure numbering.
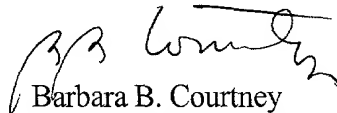
B. Amendments to the Drawings

Figures 2 and 8-14 are amended in accord with the Notice to File Corrected Application Papers mailed August 24, 2001. As a result of amending the margins of the drawings, the drawings are renumbered as 2A, 2B, 8A, 8B, 9A, 9B, 10A, 10B, 11A, 11B, 12A, 12B, 13A, 13B, 14A, 14B, 14C, and 14D.

No new matter is added by way of these amendments.

If in the opinion of the Examiner a telephone conference would expedite the prosecution of the subject application, the Examiner is encouraged to call the undersigned at (650) 838-4407.

Respectfully submitted,

Date: 12 - 21 - 01

Barbara B. Courtney
Registration No. 42,442

Correspondence Address:
Customer No. 22918

Version with Markings to Show Changes Made

In the Specification:

Figure 2A is a user interface screen of an embodiment. The screen shot continues in **Figure 2B**.

Figure 8A is an illustration of a user interface screen that allows tabbing between different scenarios. The screen shot continues in **Figure 8B.**

Figure 9A is an illustration of a user interface screen that allows tabbing between different scenarios. The screen shot continues in **Figure 9B.**

Figure 10A is an illustration of a user interface screen that shows interleaved column grids from different scenarios. The screen shot continues in **Figure 10B.**

Figure 11A is an illustration of a user interface screen that shows interleaved row grids from different scenarios. The screen shot continues in **Figure 11B.**

Figure 12A is an illustration of a user interface screen including a graph application. The screen shot continues in **Figure 12B.**

Figure 13A is an illustration of a user interface screen including a graph application. The screen shot continues in **Figure 13B.**

Figure 14A is an illustration of a user interface screen including a performance summary report. The screen shot continues in **Figures 14B-14D.**

As shown in **Figures 2A-2B**, the main interface 200 of one embodiment consists of sets of grids in a central screen area. Three panes 204, 206, and 208 are positioned in a large column, with a fourth menu pane 202 to the left of the column. The top pane 204 contains a set of grids, one for each queue in the purview of the user's contact center(s). In one embodiment, a queue is

defined as a stream of contacts. Through the grouping of various call typed into various queues, the user identifies physically or logically separate loads upon the contact center. Each queue grid includes temporally indexed information on the following statistics: contact volume; percentage of volume distribution; average handling time; actual service level expected; required staff hours; and capacity staff hours. In addition, each queue has both a queue type and service goals that are set by the user.

Another function of the long-range planner is a comparator display that facilitates the use of data generated by the long-range planner. In order to enable what-if workflow, in which the user wishes to visually compare multiple long-range plan alternatives, one embodiment of a user interface includes tabs for viewing two long-range planner scenarios alternately. **Figures 8A-8B** show[s] a user interface screen with tabs. The scenario corresponding to the left tab is displayed. **Figures 9A-9B** show[s] a user interface screen in which the "new scenario" corresponding to the right tab is displayed.

In another embodiment, the comparator display includes a method for comparing multiple grids that have similar dimensionality on a single screen. Using column-major or row-major viewing formats, as indicated by the user, the comparator display interleaves any number of grids so that each Nth row or, alternatively, each Nth column of the resulting merged grid represents data from the Nth long-range plan alternative. In this manner, the user can compare multiple columns or rows of data from a single viewpoint. **Figures 10A-10B** show[s] a display with interleaved column grids, and **Figures 11A-11B** show[s] a display with interleaved row grids.

Figures 12A-12B and **13A-13B** illustrate a graphing capability available in an embodiment of the user interface. **Figures 12A-12B** show[s] the tabbed user interface screen in the background and a graph pop-up in the foreground. The user may select an attribute to graph and a scenario or scenarios to include in the graph. **Figures 13A-13B** show[s] the background screen of Figures 12A-12B with a pop-up with the resulting graph. The graph shows contact volume for a chosen queue.

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Figures 14A-14D [is]are a user interface illustrating an aspect of the reporting capability available in an embodiment that coordinates with Excel™ to produce sophisticated, easy to read reports that include data produced by the long-range planner.

An interactive, intelligent Wizard is provided in one embodiment. As shown in **Figures 2A-2B**, Wizards are accessible to the user through the menu pane 202 of the main interface 200. The Wizards interacts with the user to guide the user through many of the functions of the long-range planner. A series of work-flows covering all of the major available activities of the long-range planner provide handheld best practices approaches for each individual activity. The Wizard provides direct hyperlinks with the continuation into the long-range planner. In complex parametric cases, the Wizard offers an alternative to filling out complex information directly. Instead, the Wizard offers a questionnaire; when the user completes the questionnaire the appropriate grid parameters are automatically specified. As shown in **Figures 2A-2B**, some of the activities available through the Wizards are creating a cost model, calculating accurate shrinkage, creating/adding a new agent profile, and creating/adding a new queue.